CANADA

National Energy Board

Reasons for Decision

Altresco Pittsfield, L.P.

Crestar Energy

Enron Capital & Trade Resources Corp.

Husky Oil Operations Ltd.

GH-4-95

January 1996

Volume I

Gas Exports

National Energy Board

Reasons for Decision

In the Matter of

Altresco Pittsfield, L.P.

Crestar Energy

Enron Capital & Trade Resources Corp.

Applications Pursuant to Part VI of the *National Energy Board Act* for Licences to Export Natural Gas and,

Husky Oil Operations Ltd.

Application Pursuant to Section 21 of the *National Energy Board Act* to amend a Licence to Export Natural Gas

GH-4-95

Volume I
January 1996

Cat. No. NE22-1/1996-1E
ISBN 0-662-23970-9

This report is published separately in both official languages.

Copies are available on request from:
Regulatory Support Office
National Energy Board
311 Sixth Avenue S.W.
Calgary, Alberta
T2P 3H2
(403) 292-4800

For pick-up at the NEB office:
Library
Ground Floor

Printed in Canada

N° de cat. NE22-1/1996-1F
ISBN 0-662-80693-X

Ce rapport est publié séparément dans les deux langues officielles.

Exemplaires disponibles sur demande auprès du:
Bureau du soutien à la réglementation
Office national de l'énergie
311, sixième avenue s.-o.
Calgary (Alberta)
T2P 3H2
(403) 292-4800

En personne, au bureau de l'Office:
Bibliothèque
Rez-de-chaussée

Imprimé au Canada

Table of Contents

List of Tables

List of Appendices

Abbreviations

Act	*National Energy Board Act*
Altresco	Altresco Pittsfield, L.P.
Bcf	billion cubic feet
Berkshire	Berkshire Gas Company
Board	National Energy Board
CEC	Commonwealth Electric Company
CELC	Cambridge Electric Light Company
CEMC	Crestar Energy Marketing Corporation
CPCo	Consumers Power Company
Coastal	Coastal Gas Marketing Company
Conwest	Conwest Exploration Company Limited
Crestar	Crestar Energy
Czar	Czar Resources Ltd.
DCQ	Daily Contract Quantity
DOE/FE	(United States of America) Department of Energy, Office of Fossil Energy
EIA	Export Impact Assessment
Enron	Enron Capital & Trade Resources Corp.
Enron Canada	Enron Capital & Trade Resources Canada Corp.
EUB	Alberta Energy and Utilities Board
FERC	(United States of America) Federal Energy Regulatory Commission
Foothills	Foothills Pipe Lines Ltd.
FS	firm service

GHR-1-87	*Review of Natural Gas Surplus Determination Procedures*
GJ	gigajoule(s)
GLGT	Great Lakes Gas Transmission Company
Home	Home Oil Company Limited
Husky	Husky Oil Operations Ltd.
IGTS	Iroquois Gas Transmission System, L.P.
MBP	Market-Based Procedure
MCV	Midland Cogeneration Venture Limited Partnership
MDQ	Maximum Daily Quantity
MMBtu	million Btu
MMcf	million cubic feet
Morgan	Morgan Hydrocarbons Inc.
NBPL	Northern Border Pipeline Company
NEB	National Energy Board
NEP	New England Power Company
NGMA	Natural Gas Market Assessment
NNG	Northern Natural Gas Company
NOVA	NOVA Corporation of Alberta
NSP	Northern States Power Company
Orbit	Orbit Oil & Gas Ltd.
the Producers	collectively; Conwest Exploration Company Limited, Czar Resources Ltd. and Orbit Oil & Gas Ltd.
Regulations	*National Energy Board Part VI Regulations*
Talisman	Talisman Energy Inc.
Tcf	trillion cubic feet
Tennessee	Tennessee Gas Pipeline Company

TransCanada	TransCanada PipeLines Limited
Technical Report	NEB report entitled *Canadian Energy Supply and Demand 1993-2010 - Technical Report*
WCSB	Western Canada Sedimentary Basin

Recital and Appearances

IN THE MATTER OF the *National Energy Board Act* and the Regulations made thereunder;

AND IN THE MATTER OF applications under Part VI of the *National Energy Board Act* for new licences to export natural gas by:

Altresco Pittsfield, L.P., Crestar Energy, Enron Capital & Trade Resources Corp., and a joint application by Morgan Hydrocarbons Inc. and Coastal Gas Marketing Company;

AND IN THE MATTER OF an application made under Section 21 of the *National Energy Board Act* to amend gas export licence GL-114 by:

Husky Oil Operations Ltd.;

AND IN THE MATTER OF Hearing Order GH-4-95;

HEARD at Calgary, Alberta on 14 November 1995.

BEFORE:

R.L. Andrew	Presiding Member
R. Illing	Member
J.A. Snider	Member

APPEARANCES:

L.E. Smith N.M. Gretener P. Maguire	Altresco Pittsfield, L.P.; and Crestar Energy
L.G Keough L. Strong	Enron Capital & Trade Resources Corp.; Midland Cogeneration Venture Limited Partnership, Morgan Hydrocarbons Inc. and Coastal Gas Marketing Company
D.A. Holgate B. Croft	Husky Oil Operations Ltd. and Talisman Energy Inc.
I. MacLean	Home Oil Company Limited
K. L. Meyer	Pan-Alberta Gas Ltd.
D.W. Rowbotham	Suncor Inc.
M.J. Samuel	TransCanada Gas Services
P. McCunn-Miller A. Reid	Alberta Department of Energy
J. Hanebury	Board Counsel

Chapter 1

Part VI - Gas Export Applications

1.1 The Applications

During the GH-4-95 proceeding, the National Energy Board ("the Board" or "NEB") examined four applications for gas export licences from the following parties:

1. Altresco Pittsfield, L.P. ("Altresco");

2. Crestar Energy ("Crestar");

3. Enron Capital & Trade Resources Corp. ("Enron"); and

4. Morgan Hydrocarbons Inc. ("Morgan") and Coastal Gas Marketing Company ("Coastal").

Additionally, Husky Oil Operations Ltd. ("Husky") requested amendments to Licence GL-114, pursuant to subsection 21(2) of the *National Energy Board Act* ("the Act"). The proposed amendments would increase the authorized export term volume and extend the term of Licence GL-114.

Table 1-1 provides a summary of each export licence application reviewed during the GH-4-95 proceeding.

This volume, Volume I, deals with the applications by Altresco, Crestar, Enron and Husky. The remaining application, that of Morgan and Coastal, will be included in Volume II of these Reasons.

Table 1-1
Summary of Applied-for Licences

Application	Buyer (Type of market)	Term	Export Point	Maximum Quantities Applied For: Daily 10^3m^3 (MMcf)	Annual 10^6m^3 (Bcf)	Term 10^6m^3 (Bcf)
1. Altresco Pittsfield	Altresco Pittsfield (cogen. plant)	1 November 1995 to 31 December 2011	Niagara Falls, Ontario and other unspecified points	895.0 (31.5)	326.7 (11.5)	4 844.0 (171.0)
2. Crestar	Northern States Power (system supply)	1 November 1996 to 31 October 2001	Monchy, Saskatchewan	179.8 (6.3)	65.6 (2.3)	328.1 (11.6)
3. Enron	Enron (sales portfolio)	1 November 1996 to 31 October 2006	*	425.0 (15.0)	155.0 (5.5)	1 550.0 (55.0)
4. Husky	Midland Cogeneration (cogen. plant)	**	Emerson, Manitoba	424.9 (15.1)	155.1 (5.5)	310.2 (11.0)
5. Morgan/ Coastal	Coastal (sales portfolio)	1 April 1996 to 31 October 2006	*	283.3 (10.0)	104.0 (3.7)	1 101.0 (41.2)

* Enron, and Morgan and Coastal requested that their licences not be conditioned with respect to export point.

** Requested a two-year extension to Licence GL-114 from 1 November 2004.

Chapter 2

Market-Based Procedure

The Board, in considering an export application, must take into account section 118 of the Act, which requires the Board to have regard to all considerations that appear to it to be relevant. In particular, the Board must satisfy itself that the quantity of gas to be exported does not exceed the surplus remaining after due allowance has been made for the reasonably foreseeable requirements for use in Canada, having regard to the trends in the discovery of gas in Canada.

In July 1987, pursuant to a *Review of Natural Gas Surplus Determination Procedures* ("GHR-1-87"), the Board implemented a procedure, known as the Market-Based Procedure ("MBP"), founded on the premise that the marketplace would generally operate in such a way that Canadian requirements for natural gas would be met at fair market prices.[1]

The MBP provides that the Board will act in two ways to ensure that natural gas to be licensed for export is both surplus to reasonably foreseeable Canadian requirements and in the public interest: it will hold public hearings to consider applications for licences to export natural gas; and it will monitor Canadian energy markets on an ongoing basis.

2.1 Public Hearing Component

The public hearing component of the MBP provides that the Board consider:

- complaints, if any, under the Complaints Procedure;
- an Export Impact Assessment ("EIA"); and
- any other considerations that the Board deems relevant to its determination of the public interest.

The following description of these three components is general in nature and applies to each application heard in GH-4-95.

2.1.1 Complaints Procedure

The basic premise of the Complaints Procedure is that, in a market which is working satisfactorily, Canadian purchasers will be able to obtain domestic natural gas supplies under contract on terms and conditions, including price, similar to those offered to purchasers under the proposed export arrangements. In order to test whether the market is in fact working in this manner, in the GHR-1-87 Decision the Board stated that:

---

[1] The MBP was modified following subsequent public hearings GHW-4-89 and GHW-1-91. The modifications did not affect the above-noted premise on which the MBP was founded.

> "The inclusion of a complaints mechanism in the new surplus determination procedures is based on the principle that gas should not be authorized for export if Canadian users have not had an opportunity to buy gas for their needs on terms and conditions similar to those of the proposed export. Applicants for export licences will have to be prepared to address any concerns on this score which may be identified in the complaints procedure ...."

The Complaints Procedure seeks to ensure that Canadian gas buyers who have been active in the market have access to gas on terms and conditions no less favourable than export customers. The Complaints Procedure enables these buyers to assess the terms and conditions of the gas sales contracts underlying export licence applications relative to the terms and conditions they are able to obtain from suppliers. If the terms and conditions being offered to export customers are more favourable than those available to domestic customers, a Canadian buyer may wish to file a complaint with the Board. The Board would adjudicate each complaint on the basis of an assessment of whether, as a matter of fact, the complainant has or has not been able to obtain additional gas supplies on terms and conditions, including price, similar to those contained in the gas export licence application submitted to the Board.

Domestic gas purchasers who wish to file a complaint must demonstrate that they have attempted to contract for additional gas supplies and that they have not been able to obtain such supplies on terms and conditions similar to those contained in the gas sales contract. At the same time, export licence applicants are expected to respond to concerns expressed by a complainant. If the Board were to find that a complaint is valid, it would then have to determine what action need be taken to remedy the situation. This could involve a delay in the licence proceeding, a denial of the export licence application or some other action appropriate to the circumstances of the particular application.

2.1.2 Export Impact Assessment

The purpose of the EIA is to allow the Board to determine whether a proposed export is likely to cause Canadians difficulty in meeting their energy requirements at fair market prices. The EIA does not contemplate the Board having a view on the desirability of any particular volume of exports or price level for Canadian gas. Rather, the intent is to focus on whether the Canadian energy market can adjust to incremental gas exports without causing Canadians difficulty in meeting their energy needs at prices determined in the market.

Applicants and intervenors have the option of using the Board's analysis or of preparing and submitting their own analysis.

The Board's first EIA, dated September 1989, was based on several projections of exports. The study featured analyses of long-term natural gas supply, demand, prices and export levels, and provided a statement of the assumptions and explanation of the analytical techniques used.

On 3 September 1992, the Board released a draft EIA and announced that it was planning to convene an EIA workshop to promote discussion and exchange information. The workshop took place in April 1993 and a summary of the discussions was released in June 1993. Subsequently, on 8 December 1993, the Board announced changes to the EIA process. It stated that, commencing with the next supply and demand report, the Board would include in those reports an analysis of the

long-term implications of alternate export levels for Canadian markets. These reports would be supplemented by assessment of market adjustment issues in the Board's Natural Gas Market Assessment ("NGMA") reports.

The Board's second EIA, which was prepared in consultation with the energy industry and other interested parties, was included in Chapter 6 of the NEB report entitled *Canadian Energy Supply and Demand 1993 - 2010 - Technical Report* ("Technical Report"), dated December 1994.

2.1.3 The Other Public Interest Considerations

As part of its assessment of the other public interest considerations, the Board normally:

- makes an assessment of the likelihood that licensed volumes will be taken;
- makes an assessment of the durability of gas sales contracts;
- has regard to whether gas sales contracts were negotiated at arm's length;
- verifies that there is producer support for a gas export application;
- verifies that there are provisions in the gas sales contracts for the payment of the associated transportation charges on Canadian pipelines over the term of the gas sales contract; and
- determines the appropriate length of term for an export licence, having regard to:

(i) evidence on the adequacy of the gas supply available to the export licence applicant to support the applied-for volumes over the requested licence term;

(ii) evidence on the necessity of the requested term in light of the terms of the associated gas sales and transportation contracts and the terms of the approvals from other regulatory bodies; and

(iii) any other evidence which the Board deems to be relevant to the appropriate term of the licence.

In assessing the above considerations, the Board takes into account information regarding gas supply, transportation, markets, sales contracts and the status of regulatory authorizations. This information is provided by applicants in response to the information filing requirements of the *National Energy Board Part VI Regulations* ("Regulations") and during the public hearing process.

The above statement on the Other Public Interest Considerations provides guidance to parties as to the considerations the Board normally has regard to in assessing the merits of gas export licence applications. However, in the context of each specific export licence application, the Board has regard to all additional factors that appear to it to be relevant. This could include, for example, any upstream environmental effects that were necessarily connected with the requirements of an export licence application.

In the GH-4-95 proceeding, the Board also considered an assessment of third party sales proposed by Altresco, tolerances proposed by Crestar, multiple export points proposed by Altresco, and a request that there be no condition in the licence regarding point of export proposed by Enron, and Morgan and Coastal.

Gas Supply

In its assessment of gas supply, the Board examines the contractual arrangements pertaining to supply and the adequacy of both reserves and productive capacity.

In making its assessment of the adequacy of gas supply available to the export licence applicant to support the applied-for volumes over the requested licence term, the Board is flexible but normally expects applicants to demonstrate that established reserves are equal to or exceed the applied-for volume, and that productive capacity is adequate to meet the proposed annual export volumes over the majority of the applied-for licence term.

Each applicant is required to provide an estimate of established reserves which can be assessed against its requirements, including the proposed export. Where an export is being supplied from a corporate supply pool, the Board will examine the make-up of that pool, its established reserves and productive capacity, and other sales commitments to be served from the same supply pool. Similarly, where corporate warranties are used to backstop a supply arrangement, the Board will examine the likely availability of this supply, including any contractual commitments.

Transportation

Regarding the transportation arrangements underpinning an export project, the Board reviews the status of all upstream and downstream transportation arrangements, including transportation contracts, either in final form or as precedent agreements. The Board also considers the term and contracted capacity of the transportation arrangements.

Markets

The applications dealt with in GH-4-95 are for sales to three types of end-use markets: sales for system supply, sales to marketers and sales to cogeneration facilities. The latter are defined as facilities that produce electricity and thermal energy for use in commercial or industrial operations. The Board's review of these types of markets includes consideration of the following:

- for exports for system supply and marketers, consideration of the purchaser's current and projected requirements and supply portfolio, and the role of the Canadian gas supply within that portfolio; and,

- for exports to a cogeneration facility, consideration of the contractual chain, from the gas sales contract to the power and thermal sales contracts. The Board also considers the

markets for the power and thermal output of the facility, and the status of project financing and construction schedules.

For each type of end-use market, the review includes consideration, among other items, of the load factors at which the proposed exports are expected to flow.

Sales Contracts

The Board's review of the contractual arrangements includes consideration of the contractual obligations between the Canadian sellers and the U.S. buyers, including executed gas sales contracts. The Board's review also includes an examination of any resale arrangements that occur beyond the international boundary sale point, where such arrangements have a direct effect on the international sales agreement. In this regard, the Board has addressed the matter of third party sales in a number of previous gas export proceedings related to exports destined for specific U.S. cogeneration markets.

Status of Regulatory Authorizations

The Board reviews the status of pertinent regulatory authorizations in Canada and the U.S., including provincial removal authorizations and Department of Energy, Office of Fossil Energy ("DOE/FE") import authorizations.

The Board's review also includes evidence of producer support, and the status of any necessary state regulatory commission approvals.

Upstream Environmental Effects

For the GH-4-95 proceeding, the Board decided to rely on the necessary connection test described in the NEB Review of its Decision in GH-5-93 and the Reasons for Decision in GH-3-94. This test is used to establish the scope of the Board's assessment of the potential environmental effects of the applications to export gas. The Board will consider the environmental effects of new upstream facilities and activities only when those facilities or activities are necessarily connected to the requirements of the export licence. For the necessary connection to exist, the export licence and new upstream facilities or activities must be integrated to the extent that they can be seen to form part of a single course of action.

Tolerances

It has generally been Board practice to include daily and annual operating tolerances of ten percent and two percent, respectively, as a condition of a licence. The purpose of this condition is to accommodate divergences due to operational and measurement discrepancies associated with a proposed export. It should be noted that exporters may accommodate, to a large degree, divergences in excess of these tolerances through the use of short-term gas export orders, issued pursuant to the Regulations.

Point of Export

The conditions contained in gas export licences, including the point of export, are primarily underpinned by the terms and conditions contained in gas sales agreements. To that extent, the Board examines gas sales agreements to ensure consistency between the contractual terms and the applied-for licence conditions. In addition to gas sales agreements, the Board also considers the transportation arrangements submitted in support of an application. It also recognizes any flexibility contained in those arrangements.

Most long-term export sales arrangements identify and involve a single point of export. However, on occasion, applicants have demonstrated the necessity for more than one point of export being identified in a licence; consequently, the Board has authorized multiple points of export for those licences. Once again, the Board reminds parties that the use of alternate export points to provide further flexibility may be accommodated through the use of short-term gas export orders.

2.2 Ongoing Monitoring

There are two components to the Board's ongoing monitoring under the MBP:

- assessments of Canadian energy supply and demand; and
- natural gas market assessments.

2.2.1 Assessment of Canadian Energy Supply and Demand

The Act requires the Board to keep under review the outlook for Canadian supply of all major energy commodities, including electricity, oil and natural gas and their by-products, and the demand for Canadian energy in Canada and abroad. As part of this function, the Board prepares and maintains forecasts of energy supply and demand and has, from time to time, published related reports after obtaining the views of provincial governments, industry and other parties. The first volume of the Board's 1994 report, entitled *Canadian Energy Supply and Demand 1993-2010 - Trends and Issues*, was released in July 1994. The companion Technical Report was released in December 1994.

Among the matters analyzed in the Technical Report are the trends in discovery of oil and gas in Canada, the evolving shares of the energy market served by the various energy forms, and the implications for the adjustment of the natural gas market in response to alternative supply and demand assumptions.

In January 1995, the Board published a report entitled *Unconnected Gas Supply - Phase 1 Evaluation of Unconnected Reserves in Alberta*, which assessed the unconnected gas reserves in a central portion of Alberta and in several large unconnected pools in Alberta.

2.2.2 Natural Gas Market Assessment

As a second part of its ongoing monitoring, the Board analyzes shorter-term developments in natural gas supply, demand and prices and periodically publishes reports on its findings.

The focus of these reports is narrower and for a shorter term than that of the supply and demand reports. They typically focus on one aspect of the market which is of current interest. Generally, the NGMA and other statistical reports provide coverage of recent developments and near-term prospects for natural gas markets, competitive activity in the market, pipeline utilization for Canadian and export purposes, and the quantity and quality of gas supply.

2.3 Summary of the Market-Based Procedure

In summary, the Board determines that the gas to be exported is surplus to Canadian needs if:

- there are no complaints registered under the Complaints Procedure;
- the EIA shows that Canadians will have no difficulty in meeting their energy requirements at fair market prices;
- there are no other major public interest concerns in the view of the Board; and
- ongoing monitoring suggests that markets are functioning normally and does not identify other issues relating to the evolution of supply or demand which cast doubt on the future ability of Canadians to meet their energy requirements.

Views of the Board

The Board finds that since no complaints were received, the applicants in this hearing have satisfied the first component of the MBP.

The next component is the EIA, wherein the Board must determine whether the proposed export is likely to cause Canadians difficulty in meeting their energy requirements at fair market prices. To do this, the Board hears evidence and arguments presented at the hearing, and considers the EIAs that are periodically published by this Board. The applicants in GH-4-95 chose to rely on the EIA prepared by the Board in its Technical Report. This indicated that Canadians would not likely experience difficulty in meeting their energy requirements at fair market prices. The Board is of the view that approval of the applied-for licences in this Volume I, which together amount to 7.2 10^9m^3 (0.3 Tcf) of gas, would not change this conclusion.

With respect to the Other Public Interest Considerations, the evidence of each applicant is presented in the individual application chapters of these Reasons. The findings of this Board with respect to these considerations, and any other factors the Board has

considered to be relevant, are contained in the "Views of the Board" section at the end of each chapter.

The hearing process components of the MBP, including the complaints procedure, EIA, and other public interest considerations, combined with the Board's ongoing monitoring of activities of the industry through its NGMAs, supply and demand, and statistical reports, all contribute to the Board's overall understanding of whether or not gas can be viewed as surplus to the foreseeable requirements of Canadians.

For these reasons, the Board is satisfied that the quantity of gas proposed to be exported does not exceed the surplus remaining after due allowance has been made for the reasonably foreseeable requirements for use in Canada, having regard to future trends in the discovery of gas in Canada.

Chapter 3

Sunset Clauses

3.1 Sunset Clauses

It has generally been Board practice in issuing a gas export licence to set an initial period of time during which, if the export of gas commences, the licence becomes effective for the full period approved by the Board. This condition in the licence is referred to as a sunset clause because the licence would expire if exports had not commenced within a specified timeframe. Inclusion of the sunset clause is intended to limit outstanding licences to those for which the gas actually starts to flow within a reasonable period after the decision. The Board questioned applicants concerning the aceptability of a sunset clause in the applied-for licences.

As a matter of general policy, the Board has set the timeframe by which exports must commence at approximately two years from the expected commencement of the licence term.

Chapter 4

Altresco Pittsfield, L.P.

4.1 Application Summary

By application dated 23 August 1995, as amended, Altresco sought, pursuant to Part VI of the Act, a licence for the export of natural gas with the following terms and conditions:

Term	-	commencing on 1 November 1995 or as soon thereafter as possible and extending for 16 years and two months	
Maximum Daily Quantity	-	895.0 10^3m^3	(31.5 MMcf)
Maximum Annual Quantity	-	326.7 10^6m^3	(11.5 Bcf)
Maximum Term Quantity	-	4 844 10^6m^3	(171.0 Bcf)
Tolerances	-	ten percent per day and two percent per year	

Altresco applied for a licence to export gas from Canada, with Niagara Falls, Ontario as the primary export point. In addition, Altresco sought the flexibility to export at other points.

The gas proposed to be exported by Altresco would be produced from the corporate supply pools of Talisman Energy Inc. ("Talisman") and Home Oil Limited ("Home") within Alberta. The gas would be transported on the NOVA Corporation of Alberta ("NOVA") system to the Alberta border near Empress. TransCanada PipeLines Limited ("TransCanada") would then deliver the gas to the primary export point at Niagara Falls. From the international border, the gas would be shipped on the Tennessee Gas Pipeline Company ("Tennessee") system and on the Berkshire Gas Company ("Berkshire") system for delivery to Altresco's cogeneration facility in Pittsfield, Massachusetts. Gas was previously exported to Altresco from Vector Energy Inc. under a long-term licence until 1 November 1993, and is currently being exported under short-term export authorizations from other producers.

4.2 Gas Supply

4.2.1 Supply Sources

Talisman and Home will provide the gas from their corporate Alberta supply pools. No specific pools have been contractually dedicated to Altresco by either Talisman or Home. Further details regarding the sale of gas to Altresco from these two producers are set out in Section 4.5.

4.2.2 Reserves

The estimates of reserves provided by Altresco for these supply pools are those recognized by the Alberta Energy and Utilities Board ("EUB"). The NEB's examination of Altresco's supply indicates that the submitted reserves exceed the total requirements of Talisman and Home, including the applied-for term volume.

Talisman provided a supply and demand balance estimate which indicates that its submitted supply of 21 375 10^6m^3 (755 Bcf) will be more than adequate to support the proposed export and other long and short-term requirements, totalling 11 552 10^6m^3 (408 Bcf). Home also provided a supply and demand balance estimate which indicates that its submitted supply of 11 275 10^6m^3 (398 Bcf) will be more than adequate to support the proposed export and other long and short-term requirements, totalling 10 311 10^6m^3 (364 Bcf).

4.2.3 Productive Capacity

Talisman submitted a comparison of its productive capacity and annual requirements indicating that it has adequate productive capacity for the majority of the applied-for licence term. Similarly, Home's projections show that it has adequate productive capacity for the majority of the applied-for term.

4.3 Transportation

Altresco has a firm service ("FS") agreement for the requisite capacity on the NOVA system. On 1 May 1995, Altresco executed a FS contract for transportation on the TransCanada system for 609 $10^3m^3/d$ (21.5 MMcf/d), effective from 1 April 1996 to 31 October 2010. Altresco is entering into a short-term FS agreement with TransCanada for the same volume of gas for the period from 1 November 1995 to 31 March 1996. Altresco also received a temporary assignment from New England Power ("NEP") of its existing FS transportation capacity for the remaining 283.3 $10^3m^3/d$ (10 MMcf/d) on TransCanada, until 1 November 1998. This temporary assignment agreement also provides for renewal of the assignment.

Altresco has executed a FS contract with Tennessee to transport the gas from the international border to Stockbridge, Massachusetts for a term of 20 years, ending 29 September 2011. Altresco has also executed a 25-year transportation agreement with Berkshire to transport the gas from Stockbridge, Massachusetts to the Altresco cogeneration plant in Pittsfield.

4.4 Market

The proposed export will be used to fuel a 160 MW gas-fired, combined-cycle cogeneration facility located in Pittsfield. The cogeneration facility, which has been in operation since September 1990, is sited adjacent to the General Electric Manufacturing and Research Facility. The entire electrical output of the facility is sold under long-term electric power contracts to NEP, Cambridge Electric Light Company ("CELC") and Commonwealth Electric Company ("CEC").

NEP, CELC and CEC are controlled by the New England Electric System, a member of the New England Power Pool. Under each of the three electric power purchase agreements, the Pittsfield cogeneration facility is fully dispatchable off-line under certain limiting terms and conditions. Since commencing operation, the cogeneration facility has experienced an average load factor of nearly 95 percent, and is expected to continue to be operated at a high level.

All of the steam output is sold to the site host, a manufacturer of electrical equipment.

4.5 Gas Sales Contracts

On 23 August 1995, Altresco executed gas purchase agreements with Talisman and Home. The terms of the agreements extend to 1 September 2010 and 31 October 2011, respectively. The Talisman agreement is tied to the NEP power contract, while the Home agreement is tied to the power contracts of CELC and CEC. Both agreements provide for an extension of the term.

Talisman and Home, under the terms of the gas purchase agreements with Altresco, are obligated to deliver the daily contract quantities ("DCQ") of 635.1 10^3m^3 (22.4 MMcf) and 333.1 10^3m^3 (11.8 MMcf), respectively. These volumes include fuel requirements to the export point. Under both agreements, there are penalties such that if either supplier fails to deliver 90 percent of its DCQ over a specified period, the supplier will bear the responsibility for the NOVA demand charge on the default quantity. In addition, Altresco has the option of reducing the DCQ by the default quantity, or terminating the agreement. Additionally, if Altresco purchases alternative supplies, the defaulting supplier will be liable for all incremental costs, including demand charges for unutilized transportation capacity.

Under the gas purchase agreements, Altresco must nominate on a pro-rata basis the cogeneration facility's estimated daily gas requirements, up to the DCQ, plus associated fuel gas. Furthermore, Altresco must nominate a minimum annual quantity of 85 percent and 75 percent of the annualized DCQs, under each of the Talisman and Home gas purchase agreements. The agreement with Talisman also provides for a minimum two-year nomination of 85 percent of the sum of the DCQs over each two-year period. Both gas purchase agreements contain a number of penalties with regard to deficient volumes.

The gas purchase agreements provide Altresco with the right to resell any of the gas it purchases. Altresco indicated that such third party sales would be dependent on the dispatching of the facility off-line, market needs for peak shaving, and the ability of the facility to operate on oil in order to maximize the economics of the facility. With respect to the third party resale rights, Altresco also requested the flexibility to export the gas at other unidentified export points.

The export price is comprised of a demand charge and a commodity charge. The demand charge component is the sum of the transportation costs incurred by the producers on the NOVA and TransCanada systems for delivering the gas to Niagara Falls. The commodity price under the agreements consists of a base price which is indexed to the price of No. 6 fuel oil, NEP's monthly coal cost, and various U.S. Gulf Coast spot gas prices.

Both agreements provide for price renegotiation. In the case of Talisman, the commodity price may be renegotiated commencing 1 September 2000 and every three years thereafter. The Home agreement provides for commodity price renegotiation commencing 1 September 1998 and every five years thereafter. The parties may submit to binding arbitration should any dispute arise from the contracts.

Altresco estimated that the price, under the terms of the agreements, for the month of July 1995 at the Alberta border, would have been $Cdn. 1.74/GJ ($Cdn. 1.83/MMBtu) under the Talisman agreement, and $Cdn. 1.64/GJ ($Cdn. 1.72/MMBtu) under the Home agreement.

4.6 Status of Regulatory Authorizations

Talisman and Home have filed applications with the EUB for gas removal permits, and decisions are pending. Altresco has received import authorization from the DOE/FE.

Views of the Board

Altresco must nominate the minimum annual quantity of 85 percent and 75 percent of the annualized DCQs, under both the Talisman and Home gas purchase agreements, respectively. The Board notes that there are penalties with regard to deficient volumes. The Board recognizes that Altresco's applied-for export of gas would flow to a cogeneration facility that has been in operation at a high load factor since September 1990, and that this market for the gas is likely to be long-term and stable. The Board is, therefore, satisfied that there is a reasonable expectation that the volumes sought to be licensed will be taken.

The Board observes that market-oriented pricing is in both gas purchase agreements, and that the base price is indexed to various U.S. Gulf Coast spot gas prices and NEP's non-gas fossil-fuel supply portfolio. The gas sales agreements are also subject to binding arbitration. The Board is, thus, satisfied that the gas sales agreements are likely to remain attractive to the parties over the proposed applied-for term and are, therefore, durable.

The primary export market for the applied-for export is the cogeneration facility, however, both gas purchase agreements provide for third party sales. The Board recognizes the nature of the electricity market in which the facility operates, and is satisfied in this case that the third party sales provision provides for contract durability and ensures that the volumes sought in the licence will be taken.

The Board notes Altresco's request for multiple export points in connection with third party sales, which are expected to be temporary and minor in nature. Altresco could use short-term export orders to provide for any third party sales. Consequently, the Board was not persuaded that a case was made on the need for additional export points.

The Board has examined the gas sales agreements between Altresco and each of Talisman and Home, and notes that they have been negotiated at arm's length.

Since Talisman and Home own the gas supply destined for export, a finding of producer support is not necessary.

In both gas purchase agreements, the contract price contains a demand charge component which is the sum of the transportation costs incurred on the NOVA and TransCanada systems. Therefore, the Board is satisfied that the gas sales agreements provide for the payment of associated transportation charges on Canadian pipelines over the term of the contract.

The Board's examination of Altresco's submitted gas supply indicates that Altresco's reserves exceed the total commitments against these reserves, and that Altresco has adequate productive capacity to exceed its requirements for the majority of the proposed licence term. In addition, the producers warrant delivery in the gas purchase agreement, will curtail interruptible sales, and will indemnify Altresco for the incremental costs incurred in purchasing alternate fuel supplies, if necessary.

The required regulatory authorizations have been applied for or have been obtained. The terms of the transportation arrangements and the gas and power purchase agreements are consistent with or exceed the proposed term of the licence. The Board is, therefore, satisfied that the requested licence term is appropriate.

Decision

The Board has decided to issue a gas export licence to Altresco, subject to the approval of the Governor in Council. Appendix I contains the terms and conditions of the licence to be issued.

Chapter 5

Crestar Energy

5.1 Application Summary

By application dated 23 August 1995, as amended, Crestar sought, pursuant to Part VI of the Act, a licence for the export of natural gas with the following terms and conditions:

Term	-	commencing 1 November 1996 and extending for five years	
Point of Export	-	Monchy, Saskatchewan	
Maximum Daily Quantity	-	179.8 10^3m^3	(6.3 MMcf)
Maximum Annual Quantity	-	65.6 10^6m^3	(2.3 Bcf)
Maximum Term Quantity	-	328.1 10^6m^3	(11.6 Bcf)
Tolerances	-	ten percent per day and two percent per year.	
	-	any volumes authorized for export which are not actually exported during any year, may be exported during the remaining term, subject only to the maximum daily volume limitation and tolerance.	

The gas proposed to be exported would be produced from Crestar's corporate supply pool within Alberta and transported on the NOVA system to the Alberta border at McNeill. Foothills Pipe Lines Ltd. ("Foothills") would then deliver the gas to the export point at Monchy, Saskatchewan. From the international border, the gas would be shipped on the Northern Border Pipeline Company ("NBPL") system to the point of interconnection between the facilities of NBPL and Northern Natural Gas Company ("NNG"). The gas would then be shipped on the NNG system to the interconnection between the facilities of NNG and Northern States Power Company ("NSP").

5.2 Gas Supply

5.2.1 Supply Sources

Crestar will provide the gas from its corporate Alberta supply pool. No specific pools have been contractually dedicated by Crestar to NSP. Further details regarding the sale of gas are set out in Section 5.5.

5.2.2 Reserves

The estimates of reserves provided by Crestar for its supply pool are those recognized by the EUB. The NEB's examination of Crestar's reserves indicates that the submitted reserves exceed the total requirements, including the applied-for term volume.

Crestar provided a supply and demand balance which indicates that its submitted supply will be more than adequate to support the proposed export, including long and short-term requirements of 7 286 10^6m^3 (257 Bcf). Crestar's estimate of supply which would be available at commencement of the proposed term is 15 876 10^6m^3 (560 Bcf).

5.2.3 Productive Capacity

Crestar submitted a comparison of its productive capacity and annual requirements. Crestar's projection shows that it has adequate productive capacity for the majority of the applied-for term.

5.3 Transportation

The gas proposed for export would be delivered to McNeill, under Crestar's existing FS arrangements with NOVA. Crestar would transport the gas to Monchy pursuant to a FS agreement with Foothills. Crestar Energy Marketing Corporation ("CEMC") would take possession of the gas at the international border and in turn sell it to NSP. NSP would transport the gas from the international border on the NBPL system, pursuant to a FS agreement with NBPL, to the point of interconnection between the facilities of NBPL and NNG. NNG would then transport the gas to NSP's facilities in Minnesota.

5.4 Market

NSP owns and operates a local distribution system which serves approximately 390,000 residential, commercial and industrial consumers in the states of Minnesota, Wisconsin and North Dakota. The proposed export would replace NSP's existing short-term Canadian supply and includes a provision for growth in its market. The gas will be used as part of the base load supply for NSP's customers in Minnesota.

Crestar stated that the gas would be taken at a minimum 80 percent load factor for the term of the proposed licence.

5.5 Gas Sales Contract

CEMC and NSP executed a gas purchase agreement dated 14 October 1994. The term of the arrangement is for seven years commencing on 1 November 1994. Gas has been flowing under this contract since 1 November 1994, pursuant to a short-term export order authorized by the Board.

CEMC obtains its gas supply from Crestar at the international border near Monchy, pursuant to a marketing agreement dated 1 September 1992. The agreement is intended as a flow-through arrangement whereby Crestar sells to CEMC the volumes of gas needed to meet CEMC's U.S. obligations.

The gas purchase agreement between CEMC and NSP provides for a maximum daily quantity ("MDQ") of 179.8 10^3m^3 (6.3 MMcf) and a minimum annual quantity equal to 80 percent of the MDQ multiplied by the number of days in the year. Should NSP fail to nominate and purchase the minimum annual quantity, it would be required to pay CEMC a deficiency charge on the difference between the actual take and the 80 percent minimum level. If CEMC fails to deliver NSP's nomination, up to the MDQ, NSP would be reimbursed for the incremental cost of acquiring substitute gas. Failure to deliver NSP's nomination on four separate occasions or for more than five consecutive days during any contract year (for reasons other than force majeure), would result in NSP having the right to terminate the agreement upon sixty days written notice. As well, NSP would have the right to take an assignment of the firm transportation on Foothills.

The price to be paid to CEMC consists of a demand charge and a commodity charge. The demand charge is equal to the NNG field rate plus a supply reservation charge of $U.S. 0.05/MMBtu. If the NNG field rate is discontinued or ceases to be representative of the transportation cost to move gas from the mid-continent to the NNG market area, the NNG field rate will be set at the last agreed upon value. The commodity charge is an index price reflecting the spot price of gas delivered to NNG for Texas, Oklahoma, and Kansas, as published in "*Inside FERC's Gas Market Report*". If the price index ceases to be published or is no longer market-responsive, it will be replaced by another published index mutually agreed upon by the parties. If the parties fail to agree upon a replacement index, the recourse will be binding arbitration.

Crestar estimated that the price, under the terms of the contract, for the month of July 1995 at the Alberta border, would have been $Cdn. 1.37/GJ ($Cdn. 1.44/MMBtu).

5.6 Status of Regulatory Authorizations

DOE/FE has authorized the import of the applied-for export volumes. Crestar has received its removal permit from the EUB. The terms and volumes are commensurate with the gas export application.

Views of the Board

Gas has been flowing to NSP under short-term export order since 1 November 1994. The Board also notes that a minimum load factor of 80 percent is expected over the term of the proposed export. The Board is, therefore, satisfied that there is a reasonable expectation that the volumes applied-for will be taken.

The Board believes that the pricing structure would ensure that the commodity charge will remain sensitive to changing market conditions. As well, the Board recognizes that NSP must nominate and purchase at least 80 percent of the annualized MDQ in accordance with the minimum purchase obligations in the gas purchase agreement and

that NSP would be responsible for a deficiency charge payment if gas is taken at levels below 80 percent of the annualized MDQ. The Board is, therefore, satisfied that the contract is durable.

The Board has reviewed the gas purchase agreement between CEMC and NSP and is satisfied that it has been negotiated at arm's length.

Since Crestar owns the gas supply destined for export, a finding of producer support is not necessary.

The Board observes that NSP is responsible for the transportation charges on NBPL and NNG, and that the revenues generated under the gas purchase agreement will likely be sufficient to enable Crestar to cover demand charges on NOVA and Foothills. The Board is, therefore, satisfied that there are provisions in the gas purchase agreement for the payment of the associated transportation charges on Canadian pipelines over the term of the agreement.

With respect to Crestar's request regarding tolerances, the Board has historically included daily and annual operating tolerances in order to accommodate divergences due to operational and measurement discrepancies. The Board did not intend that these tolerances would be used to make up volumes that were not previously taken. Moreover, such volumes could be exported under a short-term export order. However, the Board is prepared to authorize the standard two percent annual tolerance.

The Board's examination of Crestar's submitted gas supply indicates that Crestar's reserves exceed the total commitments against those reserves, and that Crestar has adequate productive capacity to meet its requirements for the majority of the proposed licence term. The Board notes that Crestar warrants delivery of gas, and NSP would be indemnified for incremental costs incurred in purchasing alternate fuel supplies, if necessary.

The Board notes that the gas purchase and transportation agreements, as well as the necessary regulatory authorizations are all for a term and volume commensurate with the requested licence. The Board is, therefore, satisfied that the requested licence term is appropriate.

Decision

The Board has decided to issue a gas export licence to Crestar, subject to the approval of the Governor in Council. Appendix 1 contains the terms and conditions of the licence to be issued.

Chapter 6

Enron Capital & Trade Resources Corp.

6.1 Application Summary

By application dated 23 August 1995, Enron sought, pursuant to Part VI of the Act, a licence for the export of natural gas with the following terms and conditions:

Term	-	commencing on 1 November 1996 or as soon thereafter as possible and extending to 31 October 2006	
Maximum Daily Quantity	-	425.0 10^3m^3	(15.0 MMcf)
Maximum Annual Quantity	-	155.0 10^6m^3	(5.5 Bcf)
Maximum Term Quantity	-	1 550.0 10^6m^3	(55.0 Bcf)
Tolerances	-	ten percent per day and two percent per year	

In addition, Enron requested that the subject licence not be conditioned so as to restrict the export to a single export point.

The gas proposed to be exported would be produced from the corporate supply pools, within Alberta, of Conwest Exploration Company Limited ("Conwest"), Czar Resources Ltd. ("Czar"), and Orbit Oil & Gas Ltd. ("Orbit"), collectively; "the Producers". The gas will be transported on the NOVA system to TransCanada near the Alberta border at Empress. TransCanada would then deliver the gas to the export point at Iroquois, Ontario. From the international border, the gas would be shipped on the Iroquois Gas Transmission System, L.P. ("IGTS") to interconnecting pipelines for shipment to markets primarily in the U.S. Northeast.

6.2 Gas Supply

6.2.1 Supply Sources

The Producers will provide the gas from their corporate Alberta supply pools. No specific pools have been contractually dedicated by the Producers to Enron, however submitted supplies have been indentified in the application. Further details regarding the sale of gas from the Producers to Enron are set out in Section 6.5.

6.2.2 Reserves

The estimates of reserves provided by Enron for these supply pools were prepared by their consultants or by the individual producer. The NEB's examination of Enron's supply indicates that the submitted reserves exceed the total requirements of the Producers, including the applied-for term volume.

Enron provided a supply and demand balance for each of the Producers which indicates that each supply pool will be more than adequate to support the proposed export and other long-term requirements. Enron also provided an estimate of submitted supply for each of the Producers which would be available at commencement of the proposed term. These estimates are 10 226 10^6m^3 (361 Bcf), 337 10^6m^3 (11.9 Bcf), and 241 10^6m^3 (8.5 Bcf) for Conwest, Czar, and Orbit, respectively. The long-term requirements are 3 994 10^6m^3 (141 Bcf), 312 10^6m^3 (11 Bcf), and 198 10^6m^3 (7 Bcf) for Conwest, Czar, and Orbit, respectively. These requirements are also supported by the corporate supply pools of each producer.

6.2.3 Productive Capacity

Enron submitted a comparison of each of the Producers' productive capacity and their annual requirements. Enron's projection shows that each producer has adequate productive capacity for the majority of the applied-for term.

6.3 Transportation

The gas proposed for export would be delivered to Empress under existing FS arrangements between NOVA and Conwest and Czar (on behalf of itself and Orbit). At this point, Enron Canada would take possession of the gas and transport it to the primary export point at Iroquois through the TransCanada system. Enron Canada has executed a precedent agreement with TransCanada for the requisite capacity and term. The incremental TransCanada facilities were approved by the Board on 30 November 1995.

Enron has executed a precedent agreement with IGTS and has agreements for capacity on various pipelines interconnecting with IGTS such as Long Island Lighting Company, Algonquin Gas Transmission Co., Tennessee, and CNG Transmission Corp.

6.4 Market

Enron is the largest buyer and seller of natural gas in North America. The gas proposed for export will form a part of Enron's corporate gas supply portfolio. Enron expects that the export volumes may displace some U.S.-sourced gas currently serving U.S. Northeast markets under long-term contract to Enron. These long-term contracts include sales to three cogeneration plants and two local distribution companies.

At the hearing, Enron reiterated that the primary market would be the U.S. Northeast. However, considering the nature of its corporate gas supply portfolio and the breadth of its markets, Enron

requested flexibility with respect to the point of export so that it could utilize other markets. Enron stated that its regulatory burden would be reduced if the applied-for licence was not conditioned to a point of export. Enron did acknowledge, however, that a licence which only authorized the export of gas at Iroquois would be acceptable.

6.5 Gas Sales Contracts

The proposed export will be governed by an Enfolio Master Firm Purchase/Sale Agreement dated 10 June 1994 between Enron and Enron Canada as confirmed by letter agreement between those parties on 24 April 1995. The confirmation letter relates to the sale of 15 800 GJ/d (15,000 MMBtu/d), plus fuel gas for the TransCanada and IGTS systems, for a ten-year period commencing 1 November 1996 at Iroquois. The gas purchase agreements between Enron Canada and the Producers mirror the gas purchase agreement between Enron Canada and Enron.

Conwest executed a gas purchase agreement and a confirmation letter with Enron Canada on 10 June 1994 and 25 April 1995, respectively. On 19 April 1995, Czar and Orbit executed gas purchase agreements and confirmation letters with Enron Canada. The gas purchase agreements between Enron Canada and the Producers are identical with the exception of the purchase quantities. In this regard Conwest, Czar and Orbit are to provide a MDQ of 10 500 GJ (10,000 MMBtu), 3 200 GJ (3,000 MMBtu) and 2 100 GJ (2,000 MMBtu), plus fuel gas, respectively. Should any of the Producers fail to provide their respective MDQ, Enron Canada would be indemnified for any incremental costs for obtaining replacement gas plus a fee. Similarly, should Enron Canada not purchase the MDQs from the Producers, the latter would be reimbursed for a price deficiency in selling the gas to a third party plus a fee.

The price to be paid to the Producers for the respective MDQs will be the Transco Zone 3 index, as published in the "*Inside FERC Gas Market Report*", plus an escalator ($U.S. 0.42 per MMbtu, escalating at two percent per year commencing on 1 November 1997), minus $U.S. 0.575 per MMBtu, minus transportation charges on the TransCanada system. For any month, Enron Canada and the Producers may convert the Transco Zone 3 index component to the New York Mercantile Exchange index or a fixed amount. Fuel gas will be provided by the Producers to Enron Canada at no cost.

Enron stated that the gas purchase agreements with the Producers were negotiated at arm's length. Any of the Producers, or Enron Canada, may terminate their respective gas purchase agreements if the necessary Canadian and U.S. regulatory authorizations and transportation agreements are not obtained by 1 October 1996.

Enron estimated that the price under the terms of the agreements, on 16 October 1995 at the Alberta border, would have been $Cdn. 1.70/GJ ($Cdn. 1.79/MMBtu).

6.6 Status of Regulatory Authorizations

Each of the Producers has applied to the EUB for their respective energy removal permits. Enron has applied to the DOE/FE for import authorization. The terms and volumes are commensurate with the gas export application.

Views of the Board

The Board notes that the gas purchase agreements require Enron to purchase the respective MDQs. Additionally, the Board recognizes that Enron is a major marketer of gas in the U.S. Northeast and, therefore, the Board is satisfied that there is a reasonable expectation that the volumes applied-for will be taken.

The Board observes the market-oriented approach used to determine the price to be paid for the gas including the flexibility to convert the price index on a monthly basis. The Board is thus satisfied that the gas purchase agreements will remain attractive to the parties over the proposed term and are, therefore, durable.

The Board has examined the three gas purchase agreements between Enron Canada and the Producers and is satisfied that they have been negotiated at arm's length.

To the extent that the Producers own the gas supply supporting this export licence application, a finding of producer support is not necessary.

Enron Canada is responsible for the transportation charges on the TransCanada system, and revenues generated under the gas purchase agreements will likely be sufficient to enable the Producers to cover demand charges on the NOVA system. The Board is, therefore, satisfied that there are provisions in the gas purchase agreements for the payment of the associated transportation charges on Canadian pipelines over the term of the gas purchase arrangements.

With respect to Enron's request for a licence that is not conditioned with respect to the point of export, the Board examined the commercial arrangements underpinning the applied-for licence. The Board notes that the point of delivery in the confirmation letter between Enron and Enron Canada is the interconnect between the TransCanada and IGTS systems. Moreover, the evidence on markets and transportation arrangements supports a point of export at Iroquois, although the Board recognizes the flexibility contained in the transportation arrangements. To the extent that Enron has provided insufficient evidence that more than one export point is required to fulfill its contractual obligations, and that Enron indicated it could operate with only Iroquois as the point of export identified in the applied-for licence, the Board is not persuaded to grant Enron's request.

The Board's examination of Enron's submitted gas supply indicates that Enron's reserves exceed the total commitments against those reserves, and that Enron has

adequate productive capacity to exceed its requirements for the majority of the proposed licence term.

The Board notes that the gas purchase and transportation agreements as well as the requisite regulatory authorizations are all for a term and volume commensurate with the requested licence. The Board is, therefore, satisfied that the requested licence term is appropriate.

Decision

The Board has decided to issue a gas export licence to Enron, subject to the approval of the Governor in Council. Appendix 1 contains the terms and conditions of the licence to be issued.

Chapter 7

Husky Oil Operations Ltd.

7.1 Application Summary

By application dated 22 August 1995, Husky sought, pursuant to subsection 21(2) of the Act, amendments to natural gas export Licence GL-114, as amended, as follows:

(i) amend Condition 1 so that the term of Licence GL-114, as amended, shall be extended for two years, expiring on 31 October 2006; and

(ii) amend Condition 2(a)(iii) by increasing the total quantity of gas that may be exported during the term of the Licence from 2 246 400 000 m^3 to 2 556 577 000 m^3.

The gas proposed to be exported would be produced from Husky's corporate supply pool within Alberta, and transported on the NOVA system to the Alberta border at Empress. TransCanada would then deliver the gas to the export point at Emerson, Manitoba. From the international border, the gas would be shipped on the Great Lakes Gas Transmission Company ("GLGT") system for delivery to the Midland Cogeneration Venture, L.P. ("MCV") cogeneration facility in Midland, Michigan.

7.2 Gas Supply

7.2.1 Supply Sources

Husky will provide the gas from its corporate Alberta supply pool. No specific pools have been contractually dedicated by Husky to MCV. Further details regarding the sale of gas are set out in Section 7.5.

7.2.2 Reserves

The estimates of reserves provided by Husky are those recognized by the EUB. The NEB's examination of Husky's reserves indicates that its reserves exceed its total requirements, including the applied-for term volume.

Husky provided a supply and demand balance which indicates that its submitted supply of 17 125 10^6m^3 (605 Bcf) will be more than adequate to support all of the proposed export and Husky's long and short-term requirements of 15 492 10^6m^3 (547 Bcf).

7.2.3 Productive Capacity

Husky submitted a comparison of its productive capacity and annual requirements. Husky's projection shows that it has adequate productive capacity for the majority of its remaining term and the applied-for extension.

7.3 Transportation

Husky has received the required two-year extension of its FS contract for the requisite capacity on the NOVA system. Husky has also executed an amending agreement for the applied-for extension of its FS contract for transportation on the TransCanada system. On 6 October 1995, MCV received approval for the applied-for extension of its existing FS agreement for transportation on the GLGT system.

7.4 Market

During the GH-8-88 hearing, the Board considered the market for the volumes of natural gas underpinning Licence GL-114, which are destined for MCV's 1 370 MW gas-fired, combined cycle cogeneration plant in Midland, Michigan. The cogeneration plant has been in commercial operation since early 1990.

The electrical energy produced by the cogeneration facility will be purchased by Consumers Power Company ("CPCo") under a 35-year electric power purchase contract. Additional electrical output and the steam from the facility will be sold to the Michigan Division of Dow Chemical Company under a 25-year contract.

Prior to the start up of the cogeneration facility, 6 996 10^3m^3/d (247 MMcf/d) of natural gas was contracted from U.S. and Canadian sources for use at the plant; approximately one-half was from Canadian sources. Husky stated that the facility is expected to continue to run at a high load factor.

7.5 Gas Sales Contract

MCV is obtaining its gas supply from Husky pursuant to the gas purchase agreement executed on 31 August 1988. The term of this agreement, as amended, ends on 31 October 2004. On 1 January 1995, Husky and MCV executed a further amending agreement to extend the term of the gas purchase agreement by two years. All necessary Canadian and U.S. regulatory authorizations and transportation arrangements on Canadian and U.S. pipeline systems must be obtained by 1 April 1996.

The gas purchase agreement between MCV and Husky, as amended, provides for a MDQ of 424.9 10^3m^3 (15.1 MMcf). The minimum annual quantity, ranges from 80 to 100 percent. The contract contains penalty provisions such that, if the minimum take provisions are not met, the buyer is required to make a deficiency payment at the end of each contract year, subject to make-up provisions. The agreement is also amended such that, for certain periods prior to the extension of the term, if the sum of the daily quantities of gas taken by MCV is less than a certain percentage of the

amended rate of take, Husky has the option to reduce the MDQ, effective at the commencement of the following contract year.

The pricing provisions in the gas purchase agreement between Husky and MCV are based upon a two-part demand/commodity charge structure at Emerson. The demand charge component is equal to the sum of the monthly demand charges on the NOVA and TransCanada systems. The commodity charge component is based upon a unit commodity charge calculated by subtracting the per unit monthly demand charge (based on a 100 percent load factor) from the Reference Price.

The Reference Price consists of a base price, multiplied by an index factor intended to track CPCo's actual monthly energy charges associated with the fixed and variable expenses of operating its coal-fired electric generation plants in Michigan. This index tracks long-term U.S. coal prices, primarily eastern Kentucky low sulphur coal, and includes short-term U.S. coal prices and general plant operating expenses. This pricing mechanism is designed to ensure that the cost of electricity from the MCV cogeneration plant compares favourably with the cost of electricity generated by the least-cost alternative available to CPCo. The fixed Reference Price to 31 October 2004 and for the applied-for extension, ending 31 October 2006, will be $U.S. 1.90/MMBtu and $U.S. 3.00/MMBtu, respectively.

7.6 Status of Regulatory Authorizations

The EUB has approved the extension to Husky's removal permit. A decision from DOE/FE for a two-year extension to MCV's import authorization is pending. The terms and volumes are commensurate with the gas export application.

Views of the Board

The Board notes that Husky has been exporting gas to the cogeneration facility since early 1990. The Board also recognizes that, under the gas purchase agreement, as amended and approved by the Board, there are minimum-take provisions and penalties attached to deficient volumes. The Board is, therefore, satisfied that the volumes sought will be taken.

The Board observes that the pricing mechanism as contained in the gas purchase agreement is designed to ensure that the cost of electricity from the cogeneration facility compares favourably with the cost of electricity generated by CPCo's least-cost alternative. The Board is, thus, satisfied that the gas purchase agreement is likely to remain attractive to the parties over the proposed extension of the licence term.

The Board has examined the amendments to the gas purchase agreement and notes that they were negotiated at arm's length.

Since Husky owns the gas supply destined for export, a finding of producer support is not necessary.

The Board notes that the demand charge component of the contract price is the sum of the transportation costs on the NOVA and TransCanada systems. Therefore, the Board is satisfied that the gas purchase agreement provides for the payment of the associated transportation charges on Canadian pipelines over the term of the applied-for extension.

The Board's examination of Husky's submitted gas supply indicates that Husky's reserves exceed its total commitments against those reserves, and that Husky has adequate productive capacity to meet its requirements for the majority of the term, including the proposed extension. The Board notes that, if Husky cannot meet its supply requirements, MCV can reduce the MDQ and Husky will indemnify MCV for any demand charges incurred in purchasing alternate fuel supplies, if necessary.

The Board notes that the gas purchase and transportation agreements as well as the requisite regulatory authorizations are all for a term and volume commensurate with the requested licence. The Board is, therefore, satisfied that the requested licence term is appropriate.

Decision

The Board has decided to issue an Amending Order to Husky, subject to the approval of the Governor in Council. Appendix I contains the terms and conditions of the amendment to Licence GL-114.

Chapter 8

Disposition

The foregoing chapters constitute our Decisions and Reasons for Decision in respect of those applications heard by the Board in the GH-4-95 proceeding.

R.L. Andrew
Presiding Member

R. Illing
Member

J.A. Snider
Member

Calgary, Alberta
January 1996

Appendix I

Terms and Conditions of the Licences to be Issued

Terms and Conditions of the Licence to be Issued to Altresco Pittsfield, L.P.

1. (a) Subject to condition 1(b), the term of this Licence shall commence on the later of Governor in Council approval hereof or 1 April 1996 and shall end on 31 October 2011.

   (b) The term of this Licence shall end on 1 April 1998 unless exports commence hereunder on or before that date.

2. For the period commencing 1 April 1996 and ending on 31 August 2010, subject to condition 5, the quantity of gas that may be exported under the authority of this Licence shall not exceed:

   (a) 895 000 cubic metres in any one day; or

   (b) 326 675 000 cubic metres in any consecutive twelve-month period ending on 31 October.

3. For the period commencing on 1 September 2010 and terminating on 31 October 2011, subject to condition 5, the quantity of gas that may be exported under the authority of this Licence shall not exceed:

   (a) 308 000 cubic metres in any one day; or

   (b) 112 420 000 cubic metres in any consecutive twelve-month period ending on 31 October.

4. For the period commencing 1 April 1996 and ending on 31 October 2011, the quantity of gas that may be exported under the authority of this Licence shall not exceed 4 844 278 000 cubic metres.

5. (a) As a tolerance, the amount that may be exported in any 24-hour period under the authority of this Licence may exceed the daily limitation imposed in conditions 2 and 3 by ten percent.

   (b) As a tolerance, the amount that may be exported in any consecutive twelve-month period under the authority of this Licence may exceed the annual limitation imposed in conditions 2 and 3 by two percent.

6. Gas exported under the authority of this Licence shall be delivered to the point of export near Niagara Falls, Ontario.

Terms and Conditions of the Licence to be Issued to Crestar Energy

1. (a) Subject to condition 1(b), the term of this Licence shall commence on 1 November 1996 and shall end on 31 October 2001.

   (b) The term of this Licence shall end on 1 November 1998 unless exports commence hereunder on or before that date.

2. Subject to condition 3, the quantity of gas that Crestar may export under the authority of this Licence shall not exceed:

   (a) 179 797 cubic metres in any one day;

   (b) 65 626 000 cubic metres in any consecutive twelve-month period ending on 31 October; or

   (c) 328 130 000 cubic metres during the term of this Licence.

3. (a) As a tolerance, the amount that may be exported in any 24-hour period under the authority of this Licence may exceed the daily limitation imposed in condition 2 by ten percent.

   (b) As a tolerance, the amount that may be exported in any consecutive twelve-month period under the authority of this Licence may exceed the annual limitation imposed in condition 2 by two percent.

4. Gas exported under the authority of this Licence shall be delivered to the point of export near Monchy, Saskatchewan.

Terms and Conditions of the Licence to be Issued to Enron Capital & Trade Resources Corp.

1. (a) Subject to condition 1(b), the term of this Licence shall commence on the later of 1 November 1996 or the date of first deliveries and shall end on 31 October 2006.

   (b) The term of this Licence shall end on 1 November 1998 unless exports commence hereunder on or before that date.

2. Subject to condition 3, the quantity of gas that Enron may export under the authority of this Licence shall not exceed:

   (a) 425 000 cubic metres in any one day;

   (b) 155 000 000 cubic metres in any consecutive twelve-month period ending on 31 October; or

   (c) 1 550 000 000 cubic metres during the term of this Licence.

3. (a) As a tolerance, the amount that may be exported in any 24-hour period under the authority of this Licence may exceed the daily limitation imposed in condition 2 by ten percent.

   (b) As a tolerance, the amount that may be exported in any consecutive twelve-month period under the authority of this Licence may exceed the annual limitation imposed in condition 2 by two percent.

4. Gas exported under the authority of this Licence shall be delivered to the point of export near Iroquois, Ontario.

Amendments to the Terms and Conditions of Licence GL-114 held by Husky Oil Operations Ltd.

Conditions 1 and 2(a)(iii) are revoked and replaced with the following:

1. The term of this Licence shall end on 31 October 2006.

2.(a)(iii) 2 556 577 000 cubic metres during the term of the Licence.